

FIR FILTER AND SETTING METHOD OF COEFFICIENT THEREOFABSTRACT OF THE DISCLOSURE

5 An FIR filter and setting method of filter
coefficients thereof enabling the prevention of breakdown
of equi-ripple of weighted approximation error and
preservation of gain of the pass band into approximately
constant. The setting method includes five steps. The
10 initial setting step is that setting of the FIR filter,
setting of the band, setting of coefficients of a pre-
filter, and setting of initial extreme value point. The
first step is that interpolation polynomial equation is
generated for interpolating amplitude characteristic from
15 the present extreme value point of the amplitude
characteristic of the frequency. The second step is that
a new extreme value point is determined from the
amplitude characteristic obtained from the interpolation
polynomial equation that is obtained in the first step.
20 The third step is that judgement is performed whether or
not position of the extreme value is approximated within
required range while repeating the first step and the
second step. The fourth step is that finding of the
filter coefficients is performed from the approximated
25 amplitude characteristic obtained in the third step.